REMARKS

Upon entry of the claim amendments, Claims 15-17 and 19-32 will be all the claims pending in the application.

Claims 15 and 29-31 have been amended to recite that the gaseous mixture has two components: a first component which is SF_6 and a second component selected from the group consisting of N_2 and CF_4. In addition, Claims 15 and 29-31 have been amended to recite that the proportion X is determined by solving the particular equations recited in each of Claims 15 and 29-31.

Claim 18 has been canceled.

No new matter has been added.

In this regard, the specification states at page 2, lines 12-15, that an object of the invention is to make it possible to monitor accurately the proportion of N_2 or of CF_4 in an N_2/SF_6 or a CF_4/SF_6 gas mixture serving as insulation gas for high voltage switchgear. Further, it is clearly stated at page 4, lines 4-21, of the application that for a N_2/SF_6 gas mixture, the mixture ratio, *i.e.*, the ratio between the partial pressures of N_2 and of SF_6 in the mixture, may be determined by solving the thermodynamic state equations of the two components of the mixture (Beattie and Bridgman equations). Thus, as required under §112, the specification clearly conveyed to a person of ordinary skill in the art at the time the application was filed that the thermodynamic state equations can also be applied to a CF_4/SF_6 gas mixture.

I. RESPONSE TO REJECTION UNDER 35 U.S.C. § 102

Claims 15-32 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,924,701 ("Delatorre").

Applicants respectfully traverse the present §102 rejection.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. MPEP 2131, citing *Verdegaal Bros. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987). Delatorre fails to teach or suggest each element of the rejected claims.

Delatorre relates to systems for measuring pressure as a function of density of a gas in a capacitor measurement device without requiring any pressure-related deflection in the measurement device. (col. 1, lines 5-9). Such pressure measurement is performed by measuring capacitance between fixed outer plates and a movable intermediate plate which are contained in a gas, sealed in a housing. (col. 1, lines 44-58). The housing includes a diaphragm which translates the pressure of the pressure media, *i.e.*, the pressure of the fluid to be measured, to the gas contained in the housing, thereby changing the temperature of the gas contained in the housing in accordance with the laws of thermodynamics. Based on measured capacitance of the device, the pressure of the pressure media can be determined. Delatorre does not, however, contain any disclosure of any method step or apparatus for determining a proportion of a component in a gaseous mixture as recited in claim 15.

The examiner broadly asserts that such a determination is at column 1, line 33, to column 2, line 40, and column 3, line 35, to column 4, line 24.

Applicants respectfully disagree. Nowhere in these cited passages, indeed, nowhere in the remainder of Delatorre, is there any disclosure as to a determination as to a proportion of a component in a gaseous mixture. For at least this reason, Delatorre fails to render Claim 15 unpatentable.

Further, Delatorre fails to teach a step of measuring the density of any fluid as recited in Claim 15. Indeed, Delatorre's pressure sensor includes only a temperature sensor section 24 and a pressure sensor section 25. (col. 8, lines 36-37; *see also* col. 3:57-62 ("The present invention involves a measurement of the properties of a gaseous dielectric medium between capacitance plates as a function of the pressure and temperature of such dielectric medium where the outer capacitance plates are fixed in position independent of pressure.")). For at least this additional reason, Delatorre fails to render Claim 15 unpatentable.

As Claims 16-17, 19-24, and 32 depend from claim 15, Applicants respectfully submit that these claims are patentable over Delatorre at least based on this dependency.

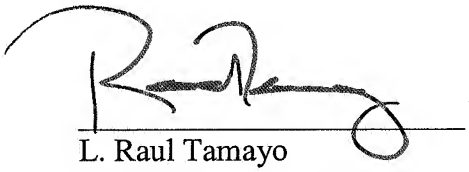
As Claims 25-31 recite elements analogous to those distinguished above, Applicants respectfully submit that these claims are patentable over the cited art for reasons analogous to those presented above with respect to Claim 15.

II. CONCLUSION

Reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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